

Application No.: 09/808,732
Amendment Dated December 11, 2003
Reply to Final Office Action Mailed May 13, 2003 &
Advisory Action Mailed December 11, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A matrix comprising ~~solid space~~ solid metal oxide particles in physical contact with each other and interstitial space ~~wherein said interstitial space comprises an~~ comprising a cross-linked interstitial polymer network covalently attached to said particles which forms an integrated contiguous network which spans the particles and which further comprises ~~comprising~~ a functional group comprising a member of a binding pair.

Claims 2-5 (cancelled).

Claim 6 (currently amended): The matrix of claim ~~2~~ 1 wherein said interstitial polymer network further comprises a tether molecule.

Claim 7 (currently amended): The matrix of claim ~~2~~ 1 wherein said solid support further comprises a blocking reagent.

Claims 8-11 (cancelled).

Claim 12 (currently amended): The matrix of claim ~~4~~ 26 wherein said reactive moiety comprises a chemical catalyst, an enzyme or a chemical reagent.

Claims 13-25 (cancelled).

Claim 26 (currently amended): ~~A matrix comprising solid space and interstitial space wherein said interstitial space comprises an interstitial polymer network comprising a functional group comprising a reactive moiety.~~ A matrix comprising solid metal oxide particles in physical

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contact with each other and an interstitial space comprising a cross-linked interstitial polymer network covalently attached to said particles which forms an integrated contiguous network which spans the particles and which further comprises a functional group comprising a reactive moiety.

Claim 27 (new): The matrix of claim 26 wherein said interstitial polymer network further comprises a tether molecule.

Claim 28 (new): The matrix of claim 26 wherein said solid support further comprises a blocking reagent.